

SCALACS

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May 2011

A Joint Publication of the Southern California and San Gorgonio Sections of the American Chemical Society



Southern California Section Educational Awards Banquet Honoring our top students and Dean Papadakis, Southern California Outstanding High School Teacher of the Year Friday, June 3, 2011

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San Gorgonio Section Student Scholarship and Awards Recognition Banquet Featured Speaker: Dr. Marinda Li Wu

Wednesday, May 11, 2011

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SCALACS

A Joint Publication of the Southern California, Orange County and San Gorgonio Sections of the American Chemical Society

Volume LXIV Ma

May 2011

Number 4

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Chair's Message



One of my favorite passages from any textbook is:

Encouraged by the quantum synthesis of incompatible concepts, the philosophy of complementarity urges that such a synthesis of opposites provides a necessary and permanent tension in our world. The reconciliation of mercy with justice is seen to reflect the wave-particle

duality of the electron.[†]

I was struck by this quote as a junior in college "pulling an all-nighter" to cram for my P. Chem. Exam (which was providing plenty of tension in my world at that time!) I thought I must have dozed off for a moment and only dreamt that I read this in my <u>chemistry</u> textbook! I decided it was time put down the books and go to sleep. But upon awakening the next morning, the quote had not disappeared from the book. Almost 30 years later, I can still recall it word-for-word.

As we are celebrating the International Year of Chemistry (IYC 2011), each quarter focuses on a specific theme to illustrate the wide range of positive effects that chemistry has on society. I suppose that reconciliation of mercy and justice may have been a bit tough to promote, so organizers were forced to settle for the following themes: Water in the Environment, Alternative Energy, Materials, and Health. These themes run through our events throughout the year, culminating with the Western Regional Meeting in Pasadena November 10-12th.

Approximately 10,000 High School students across the nation enter their local Chemistry Olympiad competitions. 1,346 of them, more than one eighth of that total, are in our Southern California Local Section, coming from 33 different high schools. This is thanks in no small part to Jerry Delker, whose dedicated service for the past 13 years has kept this program flourishing. The number of students taking the exam has been slowly increasing from 1,215 in 2009, to 1,277 in 2010, to 1,346 this year. 17 students went on to take the National exam this past month. If your local high school is not participating in this stimulating competition, please contact us.

† Walter J. Moore *Physical Chemistry*, 4th ed.; Prentice-Hall: Englewood Cliffs NJ 1972, page 571.

- Joe Khoury, Chair JKhoury@lacsd.org

Educational Awards Banquet

Friday, June 3rd, 2011

Mount St. Mary's College, Donahue Center

10 Chester Place Los Angeles, CA 90040

Awards will be presented to the top-placing students in the local High School Chemistry Olympiad, to their teachers, to local ACS scholars and to

Dean Papadakis Southern California Outstanding High School Teacher of the Year

6:00 p.m. Check-in 6:30 p.m. Dinner 7:30 p.m. Presentation of Awards

This year, we had almost 1,400 students representing 39 high schools throughout Los Angeles County take the Local ACS Exam in March. The top overall school was Whitney High School. The top first year schools were Arcadia and North Hollywood. From these students, 17 students representing 12 high schools were selected to take the National ACS Chemistry Exam on April 16th for a chance to be one of the 20 students nationwide who will be attending the Chemistry Camp in June. These students, as well as the top performers and teachers from each school of 10 or more participants, will be honored at our annual Educational Awards Banquet, along with the Outstanding High School Teacher of the Year, Dean Papadakis. Please see Page 4 for a biography of Dean Papadakis.

Reservations: We have an Enchilada Buffet featuring chicken and cheese enchiladas with all the fixings. The cost of the dinner is \$20 per person or \$15 for students, cash or check at the door. Please call Nancy Paradiso in the Section Office at 310 327-1216 or email office@scalacs.org by Monday, May 31, 2010 for reservations. *Note: Please honor your reservation. If you make a reservation and do not attend, you will be liable for the cost of the dinner.*

Directions: The meeting takes place in the Donahue Center in McIntyre Hall on the Doheny Campus. For directions, please go to http://www.msmc.la.edu/about-msmc/our-campuses/driving-instructions.asp.

Southern California Outstanding High School Teacher of the Year Recipient Dean Papadakis

Konstantine (but usually called Dean) Papadakis received his BA in chemistry from Westmont College in Santa Barbara in 1981. After working for three years at the USC School of Medicine, where he coauthored two papers, Dean completed his teaching credential in 1984, and has been a chemistry teacher at South Pasadena High School since 1985. In addition to teaching high school, Dean taught summer school at Cal State LA in 1996 and 1997, and later earned his Master of Science in 2008 from Cal State Northridge. In addition to his chemistry teaching, Dean also teaches physics, and has been involved in many activities using astronomy, particle physics and nanotechnology. Dean was the advisor to the Science club from 1994 through 1997, participant in the Goldstone Radio Telescope from 1998 to 2000, and helped build 3 portable cosmic ray detectors in 2003 for his students. He has taught his students how to use a GC, a transmission electron microscope, and has introduced computer software programs to his classes to enhance learning difficult chemical concepts.

The letters from his students describe Dean as someone who "puts his whole heart into teaching his student." "He does more than is asked of him by hosting weekly after-school study sessions and evening review sessions." "I watched as an extraordinary person taught an extraordinary subject. Chemistry is not easy to learn, but Mr. Papadakis combines straightforward lectures with captivating demonstrations to make chemistry both accessible and exciting." "He deserves to be nominated for this award because he doesn't teach chemistry because it is his job; he teaches with passion for the subject and with true care for each and every one of his students."

Dean's collogues use such words as "humble and genuine," "works amazingly hard for his students," a "caring attitude about student," and "a remarkable teacher."

It is statements like these above that make Dean a very worthy recipient of this year's SCALACS High School Chemistry Teacher of the Year.

- Dr. Gerald Delker, Education Chair

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Outreach Activities

Saturday, May 7th, 2011—UCLA Career Day, Young Hall 2033, Chemistry & Biochemistry Dept. at UCLA. For more information, contact Bob de Groot at rdegroot@oxy.edu.

May 9-12, 2011—International Science and Engineering Fair. SCALACS will host a booth at the fair and we need volunteers to man the booth. If you're interested, please contact Joe Khoury at JKhoury@LACSD.org.

Saturday, May 14, 2011—Sally Ride Science Festival at U. C. San Diego. Contact Bob de Groot at rdegroot@oxy.edu to volunteer or for more information.

Saturday, June 4th Chemistry Merit Badge SCALACS will have a booth at the Boy Scout Expo at Santa Anita Race track. We need volunteers to work with the Scouts on the Chemistry Merit Badge. The show is from 10 am to 3 pm. Contact Gerald Delker at delker@earthlink.net, or (626) 622-7776.



May 2011

Call for Nominations:

2011 Agnes Ann Green Award for Distinguished Service

Each year the Southern California Section solicits nominations for an award to recognize outstanding service to the Section. The award, named in honor of its first recipient, is based on the following criteria:

- The recipient shall have an outstanding record of major service to the Southern California Section.
- The recipient shall have made one or more identifiable major contributions to the Section, or to the National ACS through work at the Section level.
- It is preferable that the recipient be or have been an officer of the Section.

Nominations should be submitted by June 1, 2011 to:

Service Award Chair c/o SCALACS Office 14934 S. Figueroa St. Gardena, CA 90248 Or via email to office@scalacs.org

Previous Award Winners:

1988 Agnes Ann Green 1989 Arthur Adamson 1990 Stanley Pine 1991 Yoshie Kadota 1992 Rita Boggs 1993 Sandra Lamb 1994 Eleanor Siebert 1995 Norman Juster 1996 Eugene Kleber 1997 Herbert Kaesz 1998 Barbara Belmont

1999 Peter Baine

2000 Henry Abrash 2001 Thomas Payne 2002 Heather Kinney 2003 Michael Geis 2004 Harold Goldwhite 2005 Gerald Delker 2006 Sofia Pappatheodorou 2007 No Awardee 2008 Thomas LeBon 2009 Gil Mislang 2010 Robert de Groot

Second Call for Nominations

The Nominations, Elections and Awards Committee of the Southern California Section is soliciting nominations for the election of 2012 Section officers (Chair-Elect and Secretary), members of the Executive Committee, and Councilors. If you wish to propose names (including your own) for consideration, email the Section Office at office@scalacs.org or call Nancy Paradiso at 310 327-1216 by June 1st, 2011.

Section History Project Part Three: Innocence Lost (1954-1980)

It is the mid-1950's, and local chemists are proud that one of their very own, Linus Pauling, is the first Southern California Section chemist to be awarded the Nobel prize in chemistry (1954). There is a proliferation of technical societies in L.A.; The Los Angeles Technical Societies Council organizes itself in 1956 with 26 charter members, each an organization of technical/scientific professionals. Advances in chemistry bring advances in technology and scientific understanding. By time the Russians launch Sputnik in 1957, eminent L.A. chemists, long suspecting that our increasingly poor air quality has less to do with particulate pollution than chemistry, suggest that chemical reactions between reactive volatiles and the sun increase the area's ozone to unhealthful levels. ACS members write irate letters to SCALACS challenging the heretical idea that automobile exhaust contributes to the bad air quality. Nevertheless, the Motor Vehicle Pollution Control Board is established to consider the options of exhaust control.

The skyline of Los Angeles that can be seen changes dramatically over the next 10 years after a local ordinance that had prohibited high-rise buildings is overturned. Increase in automobile ownership and expansion of the freeways to accommodate them conspire to kill the once-beloved Red Car public transportation system. The last remaining trolley ceases operation in 1961. In the same year, the Southern California Section, inspired by the steadily stellar quality of chemistry research throughout the local area, awards its first annual Richard C. Tolman Medal to William G. Young in recognition of Southern Californians' contributions to the field.

The rapid growth and industrial development in the region is not without a price. Conscientious chemists and idealistic activists begin to recognize the effects of industrial pollution on health and environment, to the dismay and denial of those of more innocent times. Rachel Carson's 1962 book, Silent Spring, is both advocated and vilified in SCALACS magazine. An ardent defender of the benefits of DDT, a Montrose Chemical Company chemist challenges Carson's supporters as alarmist in a SCALACS letter to the editor.

In 1963, the Southern California Section hosts its 3rd National ACS meeting. Chemical business is still hopping, as indicated by the tremendous financial support local companies give to the annual High School Chemistry Contest. Among the roster of 1963 contributors are: Aerojet-General, Amercoat, American Potash, Applied Physics Corp., Baxter Inc., Dun-Edwards, Beckman Instruments, Bray Oil, Dow Chemical, General Film Laboratory, Goodyear Tire and Rubber, Hughes Aircraft, Lockheed Aircraft, Montrose Chemical Co., Nalco Chemical, Papermate Manufacturing, Ralph Parsons Co., Pfizer, Pilot Chemical, Productol, Standard Oil, Stauffer Chemical, Tretolite, Union Oil, US Borax, Van Camp Sea Food, and Van Waters and Rogers.

The 1960's are turbulent times throughout the nation, for the youth with their ideals are awakening to anti-war sentiments and civil rights activism. Despite the National Civil Rights Act of 1964, the racial tensions are high in Los Angeles, culminating in the 6-day Watts Riot in 1965. The smoke from the resulting arson fires fills the L.A. basin, but it's hard to tell the difference from the less-than-one-block visibility of a typical summer afternoon. For the first time in a generation, families and friends fear the fate of their young men called up by the Selective Service to the Viet Nam War. Timothy Leary advises the hip and young to "Tune In, Turn On, and Drop Out." Robert Kennedy, who (*Continued on Page 8*)

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History Project (Continued from Page 7)

challenges the nation to "dream things that never were and ask why not", appears to be America's next great hope until he is assassinated in 1969 at the Ambassador Hotel in Los Angeles.

Concern for the sustainability of natural resources and health prevails over business interests, and the Environmental Protection Agency is established in 1970. The same year, the Clean Air Act is passed, requiring local districts to attain target air quality standards..."or else" — the "or else" being withholding of Federal Highway Development funding. Southern California is caught on a double-edged sword – it needs the funding to supply the highways to relieve the congestion it has from all the cars on the road – and begins regulating automobile exhaust, as well as stationary and chemical sources of air pollution. The traffic congestion has its impact on Southern California Section meetings, already indicated by the necessity of cleaving off of the Orange County Section in the mid-60's. It becomes increasingly more difficult for hundreds of ACS members to make it across the city for an event, and meetings drop in attendance from 300 to 100. Despite that, Section Members have creative meeting topics and find ways to socialize as well as share professional information.

The violent Sylmar earthquake abruptly awakens Southern Californians in February 1971. In 1974, chemists are also shaken up at Rowland and Molina's controversial theory of ozone depletion. Escalating land prices, anti-pollution regulations, the oil crisis, and the worst recession in 40 years drive industry out of Los Angeles County. Many chemists leave town throughout the 1970's to follow employment opportunities, and others blame the pro-environment regulations for their forced early retirement. Chemists who can find a job have the new field of biotechnology to grow with. Some chemists capitalize on the regulatory atmosphere and start up environmental testing laboratories just in time to benefit from the Superfund Law passed in 1980.

The composition of the Southern California Section ACS membership changes from majority industrial to almost equal representation from industry and academia. Los Angeles County begins cleaning up after the decades-long party of unplanned growth and expansive manufacturing. The innocence and enthusiasm of the early years is lost, as the younger generation of chemists cope with industrial and regulatory transitions.



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Councilor Talking Points Highlights Spring National Meeting in Anaheim

ACTIONS OF THE COUNCIL

Election Results: The Committee on Nominations and Elections presented to the Council the following nominees for selection as candidates for President-Elect, 2012: Judith L. Benham, Dennis Chamot, Diane Grob Schmidt, and Marinda Li Wu. By electronic ballot, the Council selected Dennis Chamot and Marinda Li Wu as candidates for 2012 President-Elect. These two candidates, along with any candidates selected via petitions, will stand for election in the Fall National Election.

The Committee on Nominations and Elections announced the results of the election to select candidates from the list of nominees to represent District III and District VI on the Board of Directors for the term 2012-2014. Nominees for District III included Susan B. Butts, Pat N. Confalone, David J. Lohse, and Judith A. Summers-Gates. Nominees for District VI included G. Bryan Balazs, Bonnie A. Charpentier, Carlos G. Gutierrez, and Victor J. Hruby. By mail ballot, the Councilors from these districts selected Pat N. Confalone and David J. Lohse as District III candidates; and Bonnie A. Charpentier and Carlos G. Gutierrez as District VI candidates. Ballots will be mailed on or before October 10 to all members in District III and District VI for election of a Director from each District.

Candidates for Directors-at-Large: The Committee on Nominations and Elections announced the selection of the following candidates for Directors-at-Large for a 2012-2014 term: Ken B. Anderson, William F. Carroll, Jr., Charles E. Kolb, and Barbara A. Sawrey. The election of two Directors-at-Large will be conducted in the fall. Ballots will be mailed to the Council on or before October 10.

The Society's Finances: In spite of the economic challenges faced in 2010, the Society's operating performance held up remarkably well. Total revenue was \$463.7 million, up +0.8% from 2009, and \$2.4 million (+0.5%) higher than the 2010 budget. The Net from Operations was \$23.8 million, or \$11.9 million favorable to budget. This resulted largely from cost containment initiatives and lower-than-budgeted salaries and fringe benefits.

2012 Member Dues: The Council VOTED to set the member dues for 2012 at the fully escalated rate of \$148. This rate is established pursuant to an inflation-adjustment formula in the ACS Constitution and Bylaws.

Division Allotment Calculator: The Council VOTED to continue for three years the current formula for determining allotments to divisions.

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Councilor Talking Points Highlights (Continued from Page 9)

Member Statistics: Membership recruitment efforts were exceptionally successful in 2010. It is particularly impressive that due to efficiencies in recruiting efforts, the net cost to recruit the more than 25,000 new members decreased from \$122 per member in 2008 to \$67 in 2010 despite increases in costs for postage and printing. The official membership number for 2011 stands at 163,111.

The Board received a thorough report from the Presidential Task Force on Innovation in the Chemical Enterprise: New Technologies for the Society, New Jobs for Chemists. The Board heard the task force report recommendations on how ACS could help entrepreneurs create U.S. jobs for chemists. The Board reached consensus in support of the next steps outlined by the task force. The recommendations from this report will be sent to all Councilors.

The Board received a report from its Committee on Executive Compensation and VOTED to approve several actions relative to compensation for the Society's Executive staff. The compensation of the Society's Executive staff receives regular review from the Board.

The Board received a report from the President-Elect on plans and priorities during his presidential year. The Board also reviewed and discussed the presidential succession budget - particularly in light of increasing international and domestic travel demands.

To see the complete Councilor Talking Points, please go to our website, www.scalacs.org.

Celebrating 100 Years of Great Chemistry in Southern California!



44th Western Regional Meeting November 10-12, 2011 Pasadena Westin Hotel, Pasadena, CA Sponsored by the Southern California Section

Call for Papers

On-line Abstract Submission begins May 2, 2011 Abstracts Deadline, September 16, 2011 Advance Registration opens May 2, 2011

Please visit our website for more information http://www.wrmacs.org

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This Month in Chemical History Harold Goldwhite, California State University, Los Angeles hgoldwh@calstatela.edu

For this column and the next I am drawing on a booklet by Jon Eklund of the Department of Science and Technology of the Smithsonian Institution and published by the Smithsonian Institution Press in 1975. It is charmingly titled "The Incompleat Chymist: Being an Essay on the Eighteenth Century Chemist in his Laboratory, with a Dictionary of Obsolete Chemical Terms of the Period". Eklund's general thesis is that the so-called Whig-inductivist approach to earlier chemistries is to be avoided. By Whig-inductivist he means "... describe the experiment, give its contemporary interpretation, translate the phenomenon into modern terms, give the modern interpretation, and then make a normative judgment on the basis of the closeness of fit between the original and the modern interpretation." Thus we might "criticize" Joseph Priestley for not recognizing that his "dephlogisticated air" was actually the element oxygen.

Eklund also points out that historians have paid too little attention to the actual practices of chemists of earlier periods. "Indeed, for historians to assume that the chemists of the eighteenth century [including such towering figures as Priestley, Scheele, Cavendish and Lavoisier] were primarily concerned with theory may be to ignore most of their working hours." Eighteenth century chemical literature such as Priestley's monumental "Observations on Airs" is for the most part full of the details of chemical experiments and relatively little is written about theory.

Early textbooks of chemistry reinforce this view of the subject. Nicholas Lemery's text was one of the most popular of the early eighteenth century, and he defines chemistry in very practical terms as: "... an art which teaches how to separate the different substances which are found in a compound." Georg Ernst Stahl, the author of the rather successful phlogiston theory of combustion, and thus surely no enemy to theoretical speculation, called chemistry "... the art of resolving mixt, compound, or aggregate Bodies into their Principles and of [re]composing such bodies from those Principles." Note the use of the word "art" in both definitions. An art, at the time, was considered as something practical that could be taught, learned, and mastered. (Hence, "Master of Arts!"). These chemists, and most of their contemporaries who wrote textbooks, were insistent on chemistry being an eminently practical subject in which both analysis and synthesis played crucial roles.

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This Month in Chemical History (Continued from Page 11)

The point is that to understand eighteenth century chemistry we need to appreciate the actual working practices of the chemists of that period. In 1975 when Eklund wrote his booklet this side of chemical history was relatively ignored by most historians of chemistry perhaps because of their own lack of hands-on laboratory experience. The situation has improved somewhat in the past quarter century, but detailed accounts of what eighteenth century chemists actually did are still relatively rare. I'll give just one example of a concern that I have. When Lavoisier did his remarkable experiments on the "prodigious" gain in weight of phosphorus and sulfur upon combustion in air, what actually did he do? The products are not the most tractable. Sulfur dioxide is a choking gas; and phosphorus pentoxide an extraordinarily hygroscopic solid.

Eklund draws on the accounts of Pierre-Joseph Macquer (one of Lavoisier's contemporaries) who has left a description of eighteenth century laboratory practice. Some of Macquer's comments have a very modern ring: "...it is extremely disagreeable and difficult to continually stop in the midst of the most interesting researches, and to use considerable precious time in cleaning vessels, arranging them, putting on inscriptions etc. These things are quite capable of cooling or retarding the progress of genius. They are tedious and disgusting, but they are necessary." Excellent advice for our graduate students.

A significant problem in the eighteenth century laboratory was the lack of good ventilation. The better situation for a laboratory was on the uppermost floor of a building with a good high chimney to provide a draught. The downside of such a location was having to carry all supplies, equipment, fuel, and water upstairs. Fuel was critical – and it was primarily charcoal. The major means of carrying out chemical change at that period was the application of heat. As Lemery says: "...indeed almost all of the chemical operations are made to occur by means of fire."

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San Gorgonio Section

Chair's Message



I wanted to pass along information about two very meaningful events that are worth supporting. The first event is happening in the San Gorgonio Section:

The Chemistry Department of the California State Polytechnic University, Pomona,

is pleased to present the fourth annual

Chevy Goldstein Distinguished Lecture in Chemistry and Student Research Awards.

Please join us as we honor the memory of our late colleague Dr. Elisheva "Chevy" Goldstein. Our speaker will be Professor Douglas Rees of the California Institute of Technology.

> Friday May 13, 2011 Kellogg West Conference Center

Noon - 1:30 pm Buffet Lunch

1:30pm - 1:45pm Presentation of Student Research Awards

1:45 pm Professor Douglas C. Rees. "The Structural Basis of Biological Nitrogen Fixation"

Seating is limited. Please RSVP at http://sites.google.com/site/ goldsteinsymposium/. For directions to Kellogg West, see http:// www.kelloggwest.org or call 800-593-7876.

"Prof. Goldstein joined the Cal Poly Pomona chemistry faculty in 1978 after completing her BS at CUNY (1971), MS at Cal Poly Pomona (1974), and PhD at USC (1979). She was an accomplished teacherscholar in computational physical chemistry until her untimely passing in January 2007. A distinguished lecture and student research award series has been endowed by her family and friends in memory of Prof. Goldstein's lifelong scholarly achievements."

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San Gorgonio Section

Chair's Message (Continued from Page 13)

The second event that I want to encourage participation in is "Pennies for PUR[™] Water", launched by ACS as part of the International Year of Chemistry. Here is some background information:

"Every day more than 4,000 children in developing countries die, simply because they don't have clean drinking water. With your help, we can make a difference. Procter & Gamble, in collaboration with the US Centers for Disease Control and Prevention, has developed a low-cost technology in a packet, called PUR[™], to purify heavily contaminated water so that it meets World Health Organization standards for safe drinking water. PUR[™] packets are being distributed through Children's Safe Drinking Water (CSDW). Each packet costs only 3.5 cents and safely treats 2.5 gallons of water."

ACS is asking volunteers to raise both money and awareness of this life-saving program. "Pennies for PUR[™] Water" asks participants to create donation opportunities by placing labeled water bottles where people can "Pitch in their Pennies" to raise money to supply those in need with clean water. This seems like a great project for youth groups! The collected funds are then donated to Children's Safe Drinking Water who distributes the packets. For more information on this program and to donate, go to http://www.csdw.org/csdw/home.shtml.

- Eileen DiMauro, 2011 Chair

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Student Scholarship and Awards Recognition Banquet

Wednesday, May 11, 2011

The Kellogg West Conference Center, Dining Room C on the campus of Cal Poly Pomona 3801 W. Temple Avenue, Pomona Phone: 909-869-2222

Dr. Marinda Li Wu "Science is Fun!"

San Gorgonio Section

Social and Check-in: 5:45 PM Dinner: 6:30 PM Featured Speaker: 7:15 Awards/Recognition Program Following

In March, high school students in the San Gorgonio Section region took an exam to qualify for the National Chemistry Olympiad. Our section also uses this exam to choose the recipients of Section-sponsored college scholarships. Please join us in honoring these truly remarkable students and their teachers at this meeting.

Biography: Dr. Marinda Li Wu received a B.S. *cum laude with Distinction in Chemistry* from Ohio State University and a Ph.D. in Inorganic Chemistry from the University of Illinois. She enjoyed over thirty years of experience in the chemical industry working almost twenty years in Dow Chemical R&D as well as Dow Plastics Marketing forging partnerships between industry, education, government and communities. Dr. Wu also has entrepreneurial experience with various small chemical companies and startups including *"Science is Fun!"* which she founded to engage young students in the excitement of science and enhance public awareness of the importance of supporting and improving science education.

An ACS member since 1971, Dr. Wu has served in various leadership roles for ACS at local and national levels. She served as California Section Chair during its 100th Anniversary, National Chemistry Week Coordinator, Public Relations Chair, Women Chemists Chair, Government Affairs Chair, and Local Section Career Program Coordinator. Dr. Wu also currently serves as Director-at-Large on the national ACS Board of Directors. *(Continued on Page 16)*

San Gorgonio Section

May Meeting (Continued from Page 15)

Abstract: The importance of science and technology in the 21st century is ever more apparent in our fast pace changing world. As a high school student many decades ago, I remember trying to decide between majoring in chemistry or French in college. I have always been happy with the various choices I have made in life. I will share my personal and professional journey over the last forty years. "Wherever you go, go with all your heart." is what I have always believed.

As an ACS Career workshop presenter and career consultant for many years, I will touch upon some possible career options and how to best make such choices in life.

Dinner: Buffet style will consist of salad with dressing and fresh sliced fruit; bread and butter; braised barbequed tri tip and chicken marsala; mashed potatoes; mixed vegetables; dessert; iced tea, coffee, or water.

Cost: The cost (meal, tax and tip) is \$13 members, \$15 non-members, \$10 seniors and retirees, \$8 students, free for student honorees and their teachers, cash or check only please, at the door.

Reservations are necessary: Please RSVP no later than Wednesday May 3rd noon by contacting Dennis Pederson, treasurer, dpedersn@csusb.edu, phone 909-537-5477 or David Srulevitch, secretary srulev@charter.net, phone 909-594-3070. Include names and number of persons. Please be certain to honor your reservations.

Directions: From Interstate 10, take the Kellogg Drive exit. Heading south on Kellogg Drive, stay in the right lane and curve right onto University Drive. Stay on University Drive past 3 stop signs, then turn at the first left (Center Circle Road) up the hill to Kellogg West. From I-57, exit Temple Ave. Go north/west following Cal Poly signs past the lights at Valley Blvd. Turn right onto University Drive. Take the third right (Center Circle Road) up the hill to Kellogg West and the Collins College for Hospitality Management at the south end of the parking lot.

A campus map can be found at www.kelloggwest.org, go to locations and points of interest and click on campus map.

Attention Chemistry Professors: Please bring any extra science or chemistry textbooks that you may have to this meeting so that we may donate them to the students and high school libraries.. Thank you!

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May 2011

SOUTHERN CALIFORNIA SECTION AMERICAN CHEMICAL SOCIETY 14934 S. FIGUEROA STREET GARDENA, CA 90248

PERIODICAL

IMPORTANT Do Not Delay!

Contains Dated Meeting Announcement

Bi-Section Chemists' Calendar May 7 UCLA Career Day - see page 5 International Science Fair—see page 5 9-12 SG Student Scholarship and Awards Recognition Banquet-see 11 page 15 13 SG Chevy Goldstein Distinguished Lecture in Chemistry and Student Research Awards—see page 13 14 Sally Ride Science Festival at UCSD—see page 5 June SC Educational Awards Banquet honoring Dean Papadakis-3 see page 3 4 Boy Scout Chemistry Merit Badge Expo-see page 5 Have a great Summer!